

## REMARKS/ARGUMENTS

### *Status of Claims*

Claims 1 and 14 been amended.

Claims 36-52 were previously canceled.

Claim 35 is currently canceled.

Claims 4-10 have been withdrawn.

Thus, claims 1-3, 11-34, and 53 are currently pending in this application.

Applicants hereby request further examination and reconsideration of the presently claimed application.

### *Claim Rejections – 35 U.S.C. § 112*

Claims 34 and 35 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 35, Applicants have incorporated the limitations of now canceled claim 35 into claims 1 and 14 and further removed the term “intimately” thus rendering the rejections related to the use of this term moot.

Regarding claim 34 Applicants respectfully submit that the term “substantially free” is a term familiar to one of ordinary skill in the art. Further, Applicants submit that the term “substantially free” is necessarily defined in the context of the efficacy of the formulation. Specifically, Applicants have disclosed the degradation products of the bisphosphonic acid derivatives are inactive. *See* instant application at paragraph [0008]. Thus, Applicants have established an upper limit in the amount of degradation products that can be present as no more than negatively affects the disclosed use for the formulation. Further, the term “substantially free” has a lower limit of zero. Given these inherently disclosed ranges of degradation products

in the formulation, the term “substantially free” is necessarily a value represented by this range. Applicants respectfully request withdrawal of this rejection.

### ***Interview***

Applicants thank the Examiner for the courtesy of a telephonic interview on September 17, 2009, the content of which is accurately reflected in the September 23, 2009 interview summary.

### ***Claim Rejections – 35 U.S.C. § 102***

Claims 1-3, 11-22, 25-32, 34, and 53 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Jasprova, WO 02/03963 (hereinafter *Jasprova*). Applicants note claim 35 was not rejected as being anticipated by *Jasprova*. Consequently, Applicants have amended independent claims 1 and 14 to recite the limitations of now canceled claim 35. Applicants respectfully submit the pending claims are not anticipated by *Jasprova* and request withdrawal of the rejections.

### ***Claim Rejections – 35 U.S.C. § 103***

Claims 1-3, 11-34, and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jasprova* in view of Flash-Ner-Barak, et al., WO 02/00204 (hereinafter *Flash-Ner-Barak*). Alternatively, claims 1-3, 11-34, and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Jasprova* and *Flash-Ner-Barak* further in view of Katdare, et al., WO 95/29679 (hereinafter *Katdare*). While claim 35 is not listed as rejected as obvious over the prior art, Applicants understand that the Examiner considers claim 35 (and now claim 1 as amended) to be obvious over the prior art as described in the September 23, 2009 interview summary.

### ***The Legal Standard for Obviousness***

In *KSR Int'l Co. v. Teleflex, Inc.*, the United States Supreme Court explained that, “a patent composed of several elements is not proved obvious merely by demonstrating that each of

its elements was, independently, known in the prior art,” but, additionally whether “the claim extends to what is obvious.” See *KSR Int’l Co. v. Teleflex, Inc.*, 82 USPQ2d 1385, 1397 (2007). Expounding on its edict, the Supreme Court went on to opine that an obviousness determination is based upon a “proper application of *Graham*,” including consideration of “secondary factors” that may weigh against an obviousness determination. See *KSR Int’l Co. v. Teleflex, Inc.*, 82 USPQ2d at 1399 (citing *Graham v. John Deere Co. of Kansas City, et al.*, 383 U.S. 1, 148 USPQ 459 (1966)). Applicants respectfully submit the Office Action’s suggestion of a *prima facie* case of obviousness must fail because the unaddressed “secondary considerations” described below render the instant claims nonobvious. See *KSR Int’l Co. v. Teleflex, Inc.*, 82 USPQ2d at 1399. Applicants provide herewith a Rule 1.132 declaration of inventor Geena Malhotra and accompanying Exhibit A setting forth evidence of the following secondary considerations of nonobviousness.

**The instantly claimed process displays unexpected, beneficial results**

A showing of unexpected results may rebut a *prima facie* case of obviousness, and is particularly applicable in the inherently unpredictable chemical arts where minor changes may yield substantially different results. See e.g., *In re Soni*, 34 USPQ2d 1684, 1687 (Fed. Cir. 1995). Exhibit A of the declaration demonstrates that the instantly claimed process produces bisphosphonic acid formulations that are stable for up to 24 months under the indicated storage conditions. In stark contrast, the cited references *Flash-Ner-Barak* and *Katdare* are silent as to stability of their disclosed compositions while *Jasprova* discloses stability data for only six months of storage and does not provide any data for the water content of the formulation. As known to one of ordinary skill in the art, in the case of bisphosphonic acid formulations, the water content of the formulation is directly related to the stability of the formulation. An increase in the water content

of the formulation increases the instability of the formulation. Exhibit A demonstrates that for the instantly claimed compositions prepared as disclosed, the resulting formulations are stable for longer time periods than disclosed by the cited references. Applicants demonstrate this surprisingly beneficial result both in terms of the low level of impurities present in the formulation as a function of time and in terms of the stability of the formulation's water content as a function of time.

As set forth above, the declaration provides strong evidence that the Applicants' instantly claimed subject matter affords an unexpected and beneficial increase in stability. Accordingly, the claimed subject matter is nonobvious in view of these unexpected results. Applicants respectfully request withdrawal of the rejections and allowance of the pending claims.

## CONCLUSION

Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections are respectfully requested by Applicants. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Final Office Action dated May 8, 2009 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account Number 50-1515 of Conley Rose, P.C., Texas. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,  
CONLEY ROSE, P.C.

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